

5994513

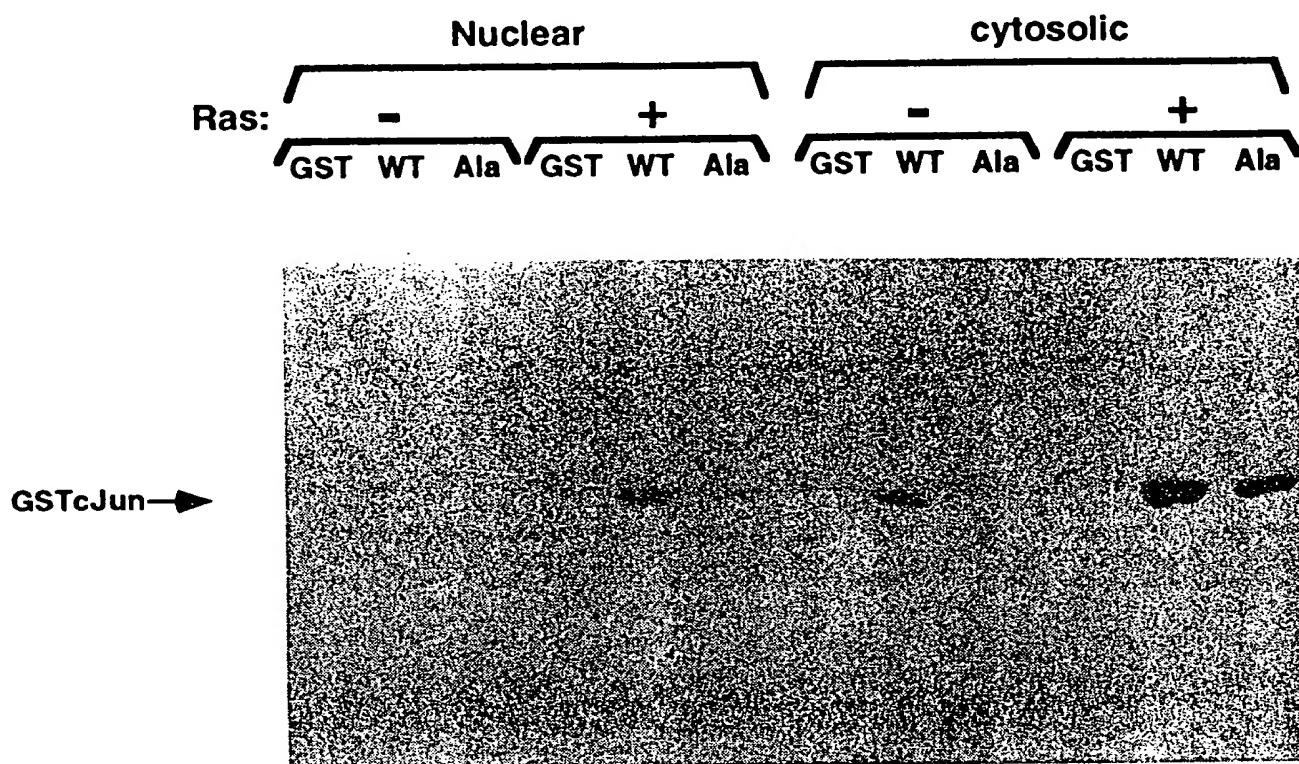


FIG. I

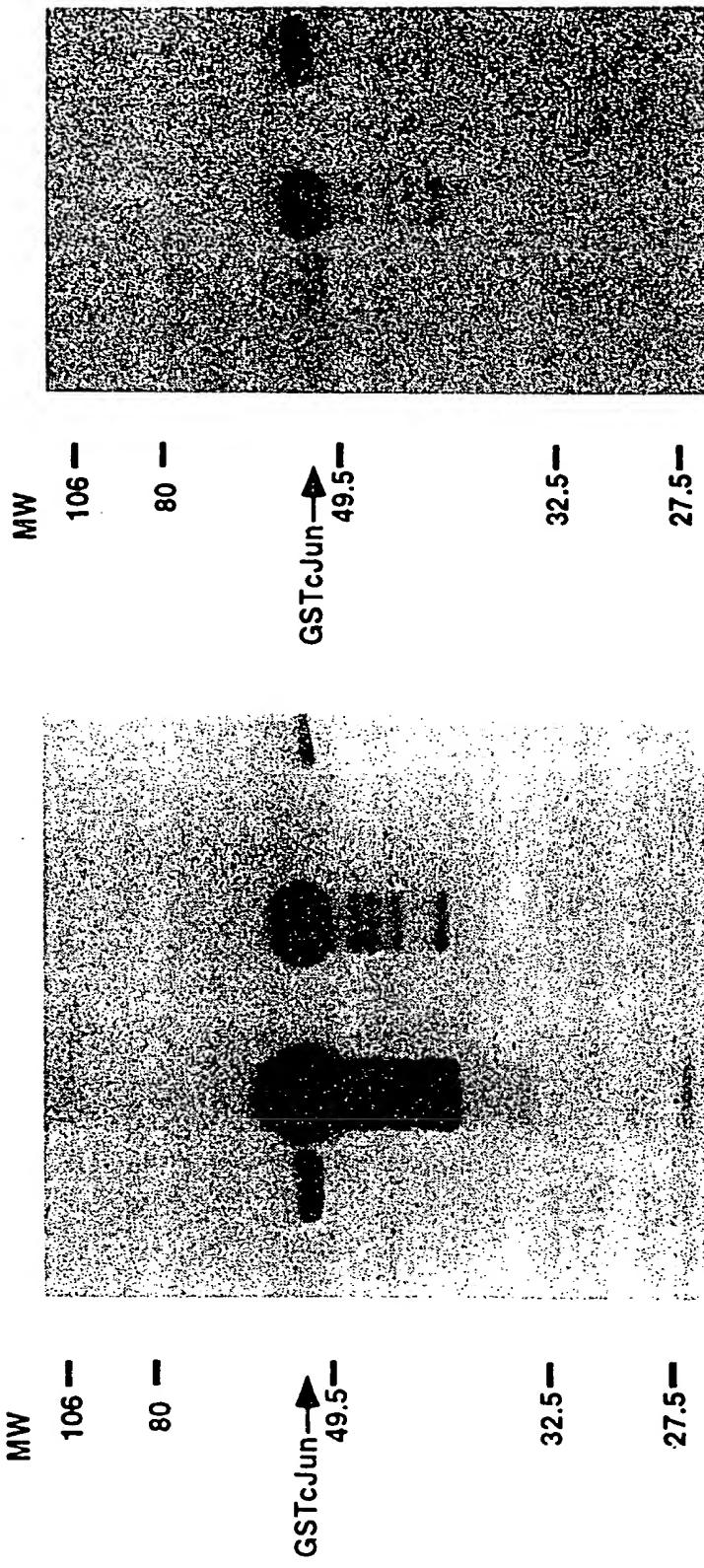
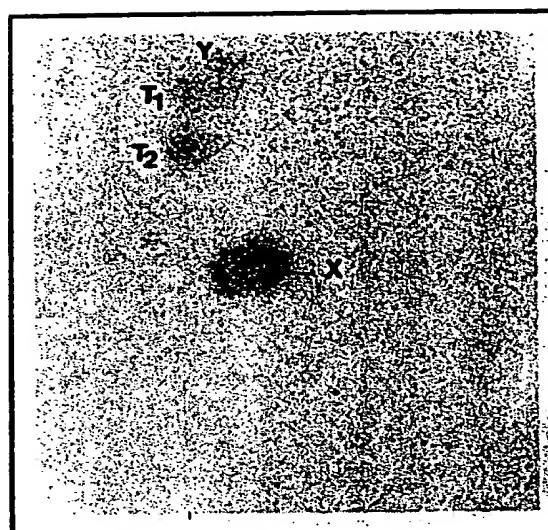


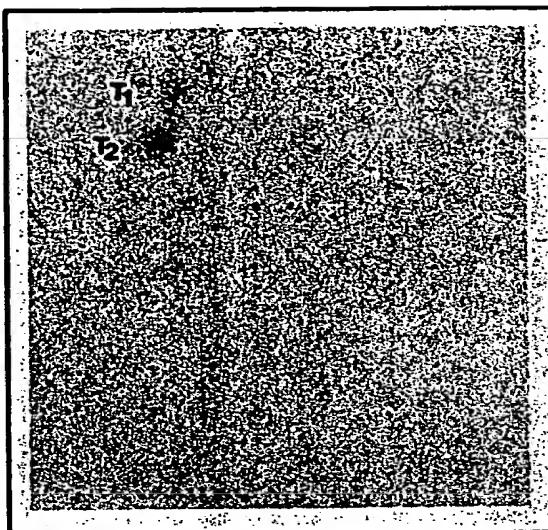
FIG. 2A FIG. 2B

FR3T3 Ras

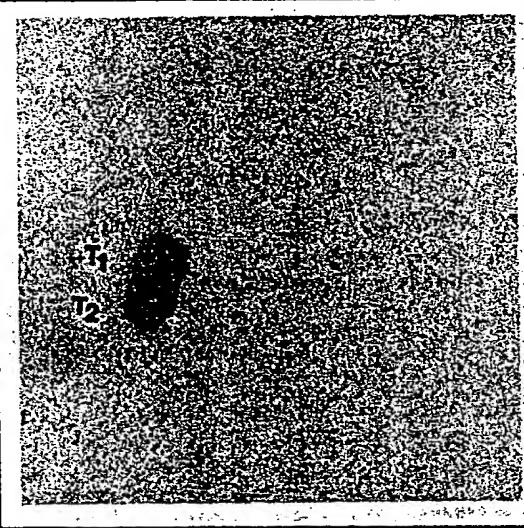
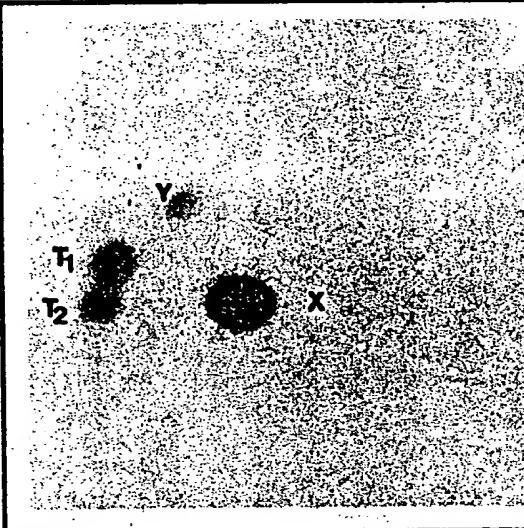
WT



A63/73



HeLa



Jurkat

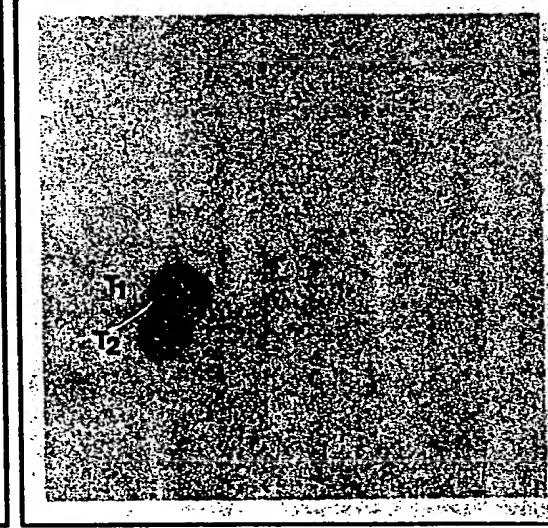
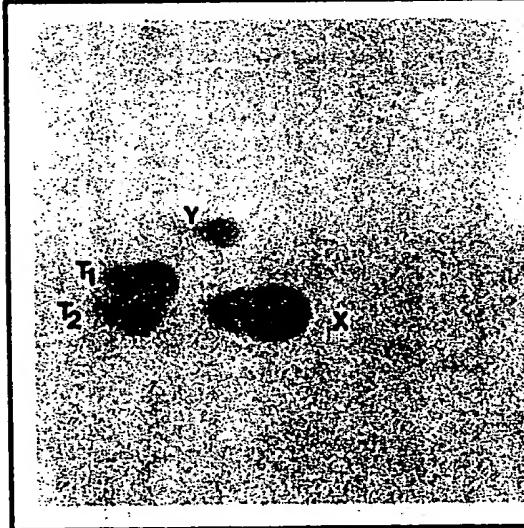
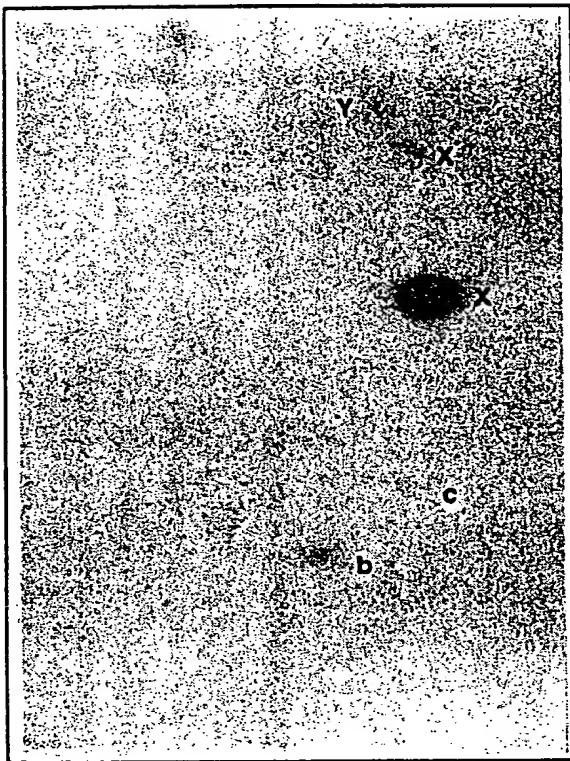


FIG. 3A

In Vitro



In Vivo

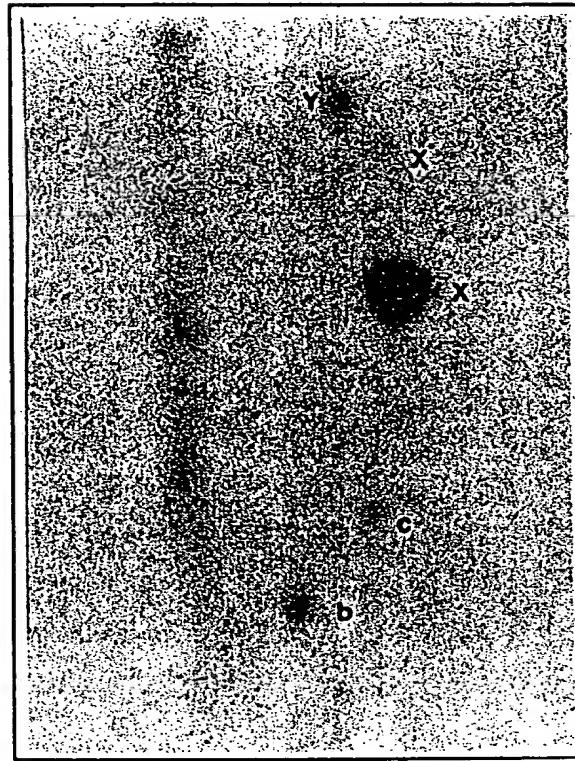


FIG. 3B

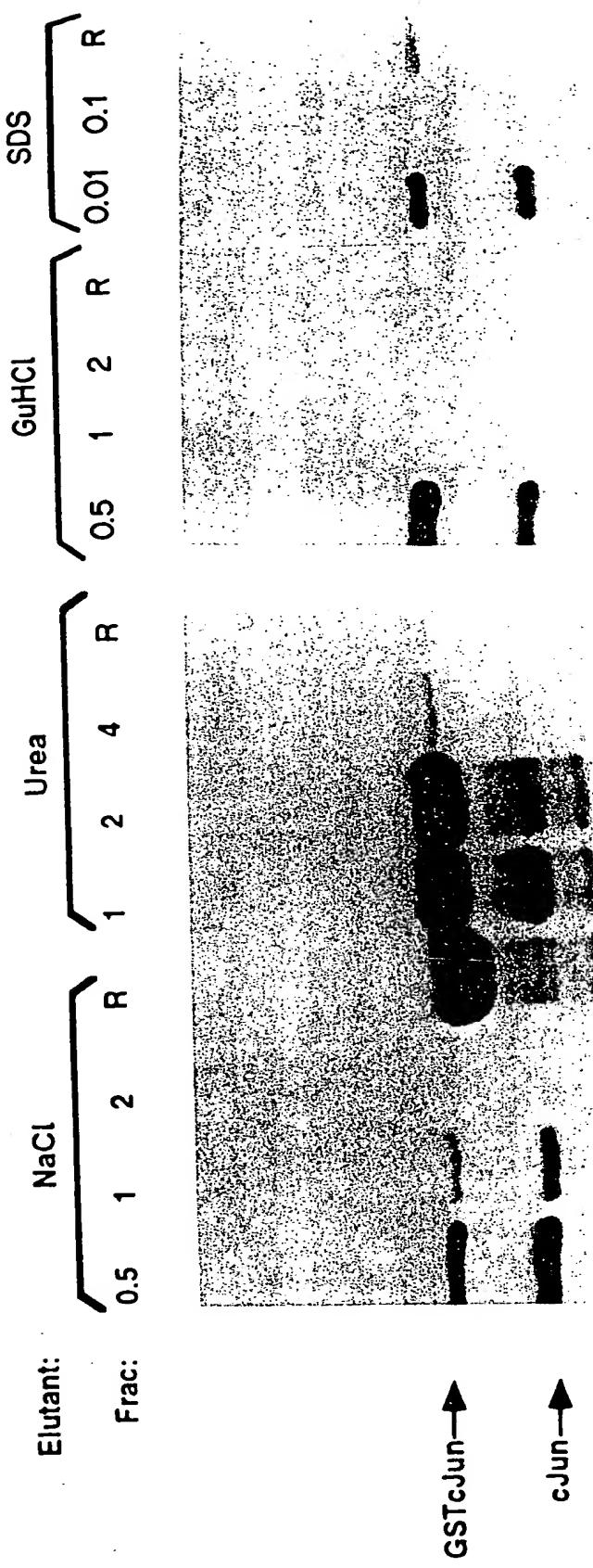


FIG. 4A

1 2 3 4 5

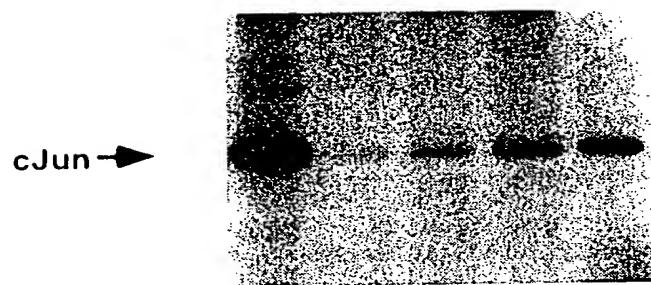


FIG. 4B

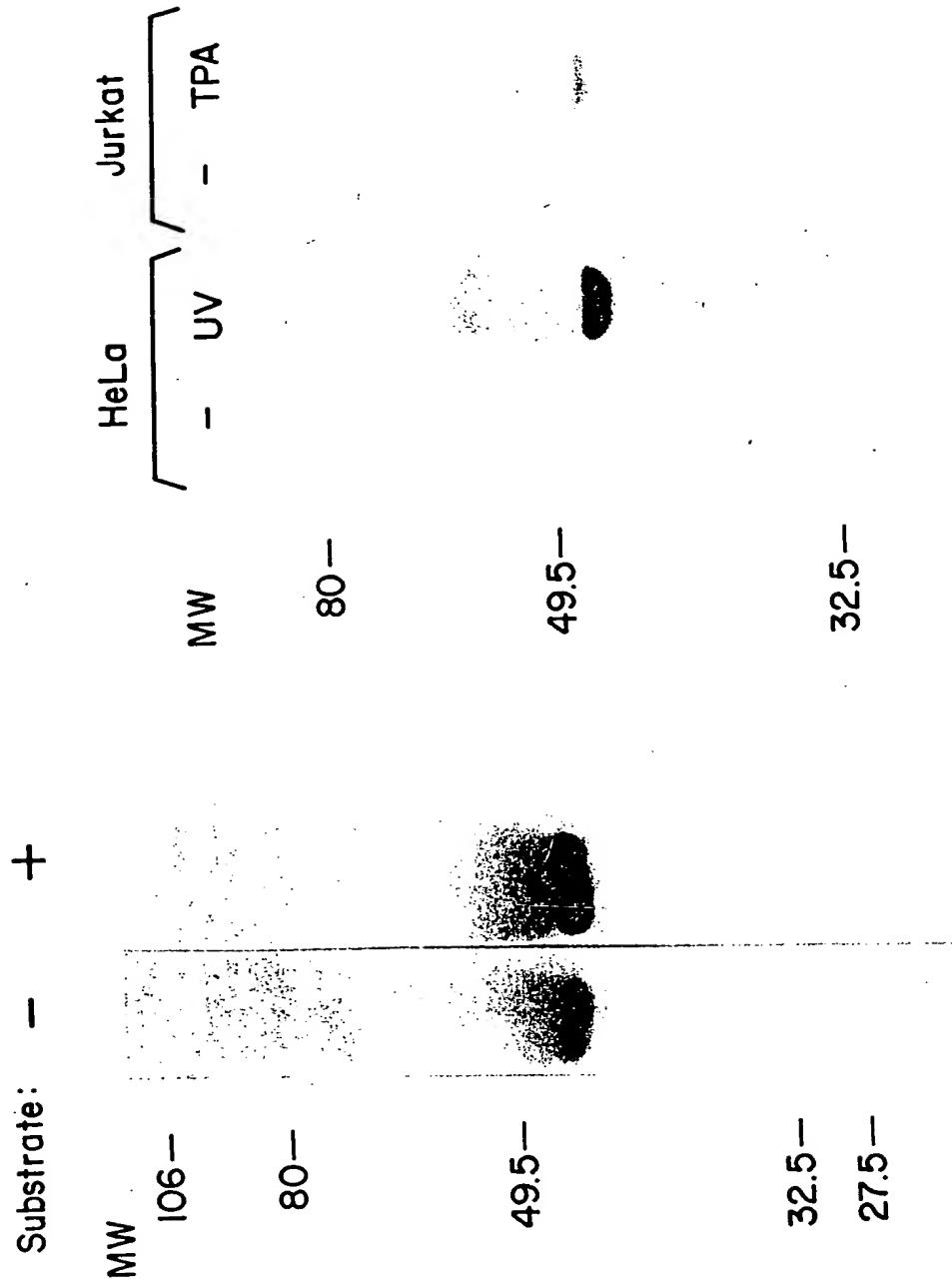


FIG. 5A

FIG. 5B

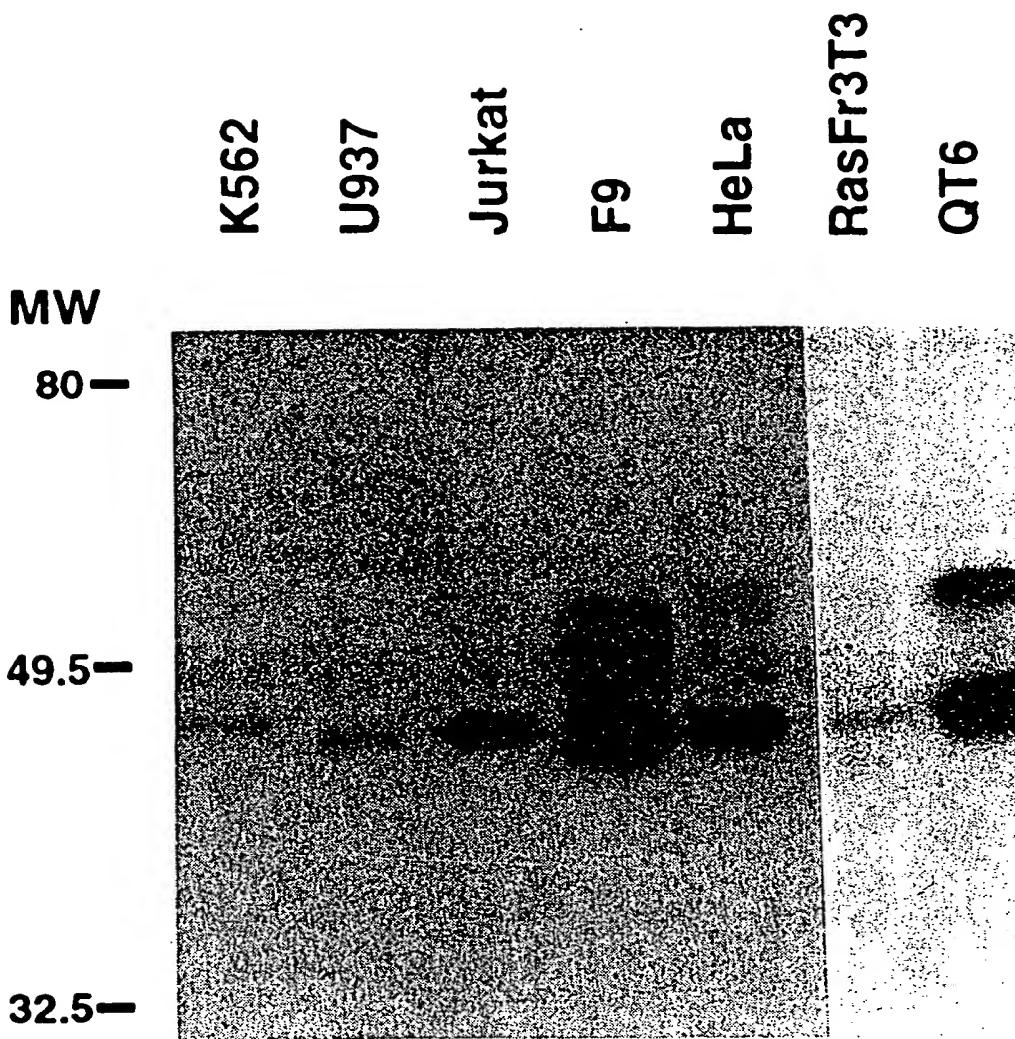
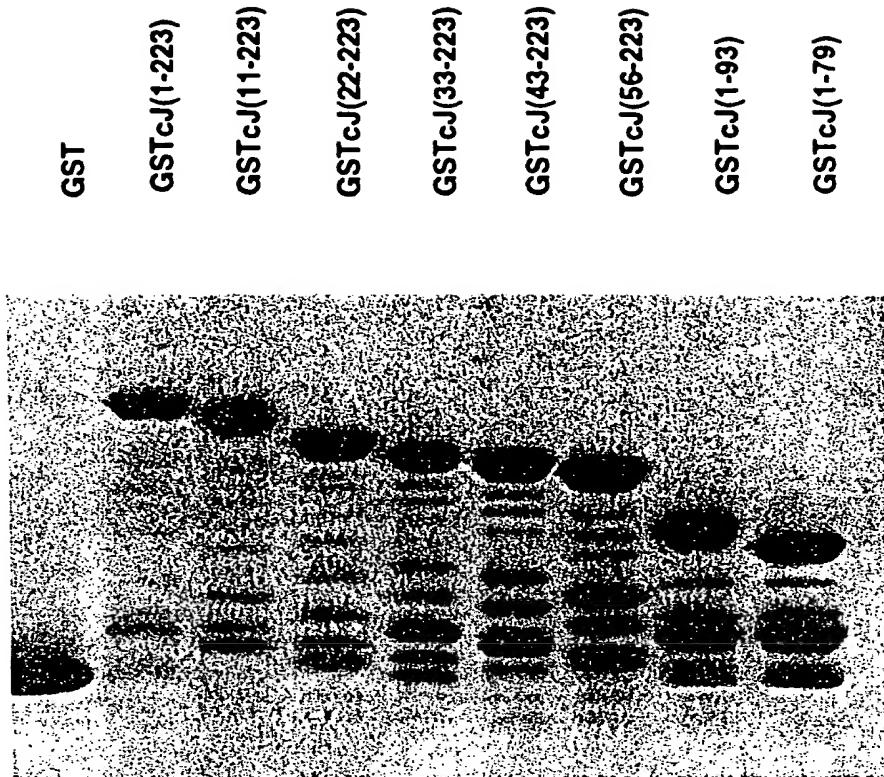


FIG. 5C

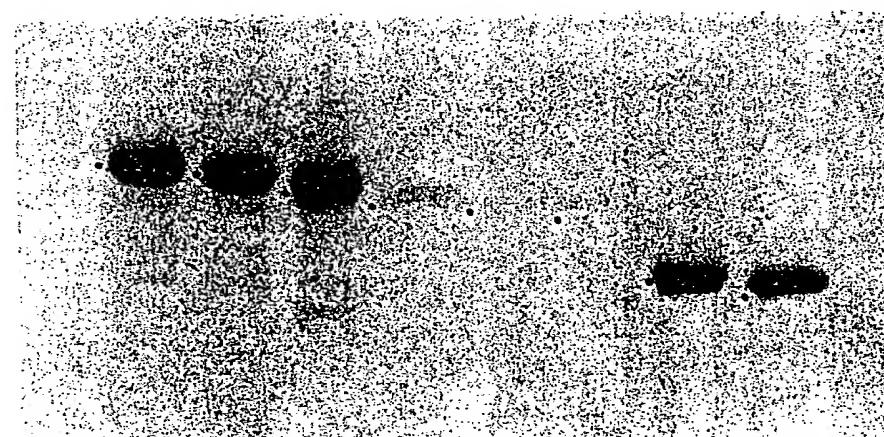
Protein Gel

FIG.6A



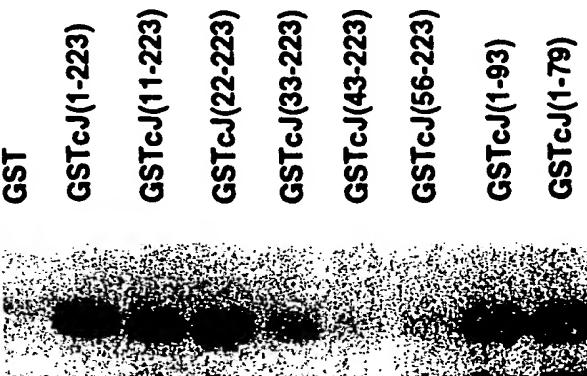
32 P-Immobilized Substrate

FIG.6B



32 P-Exogenous Substrate

FIG.6C



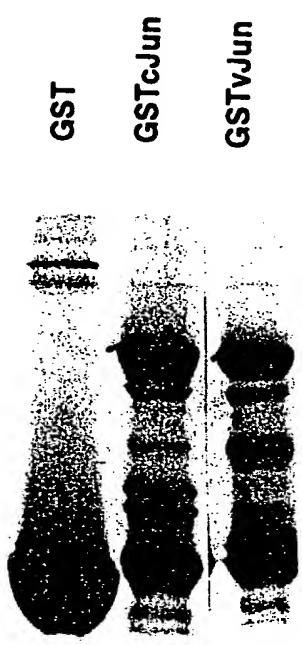


FIG. 7A

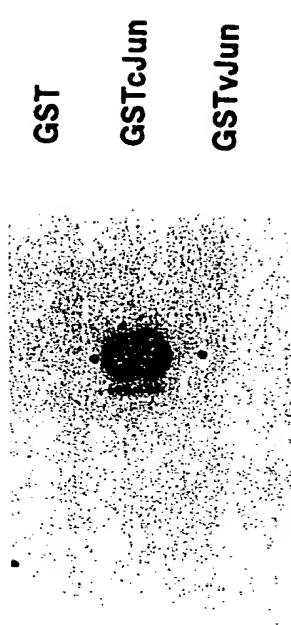


FIG. 7B



FIG. 7C

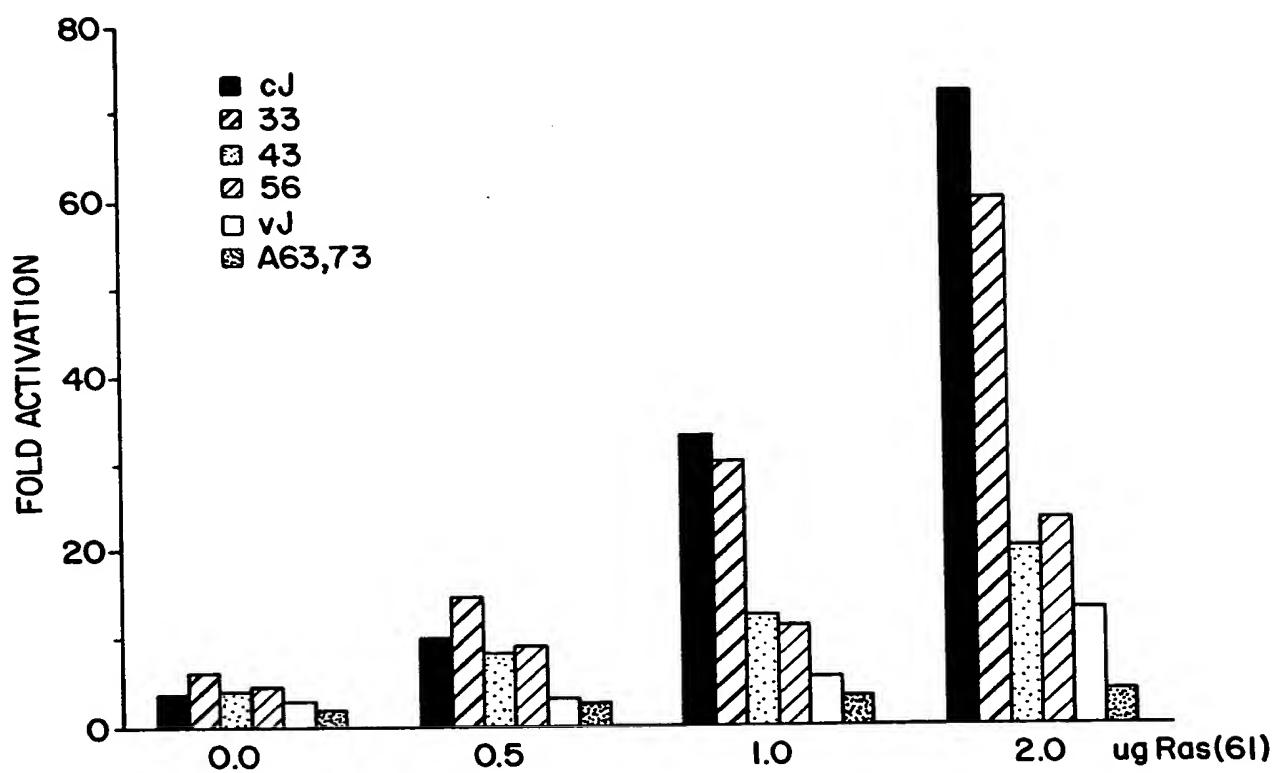


FIG. 8A

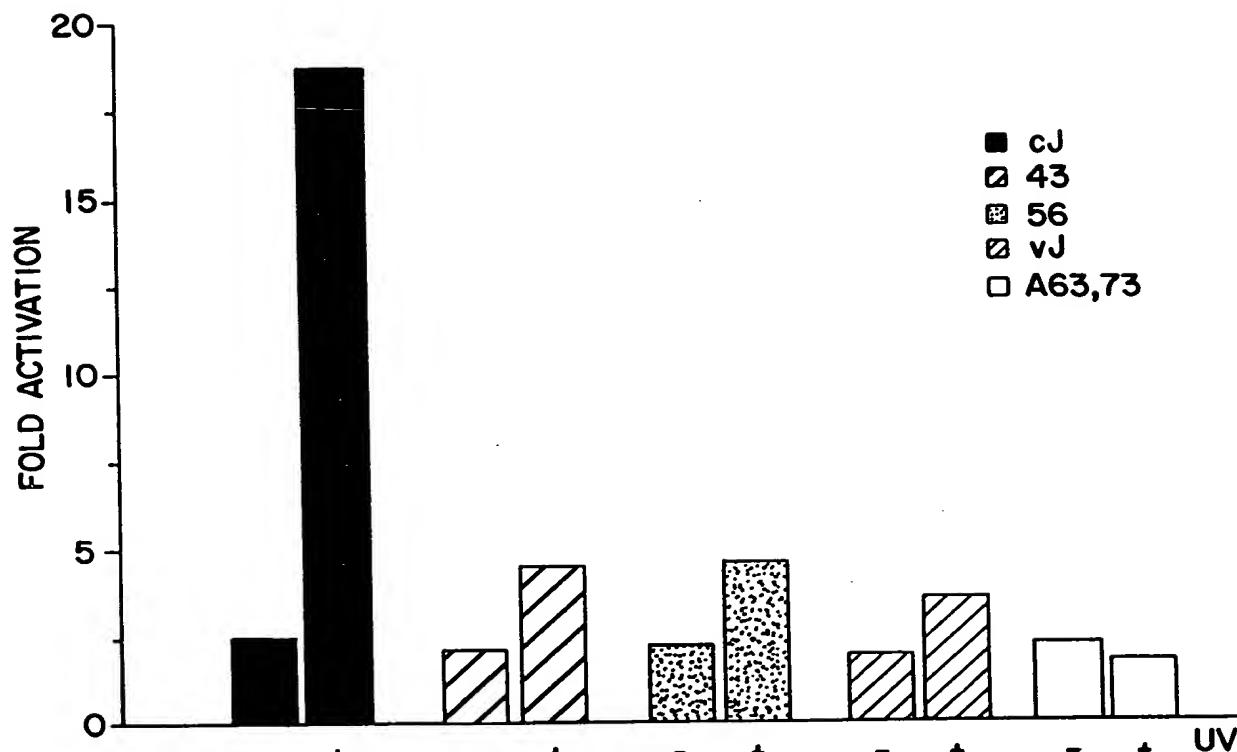


FIG. 8B

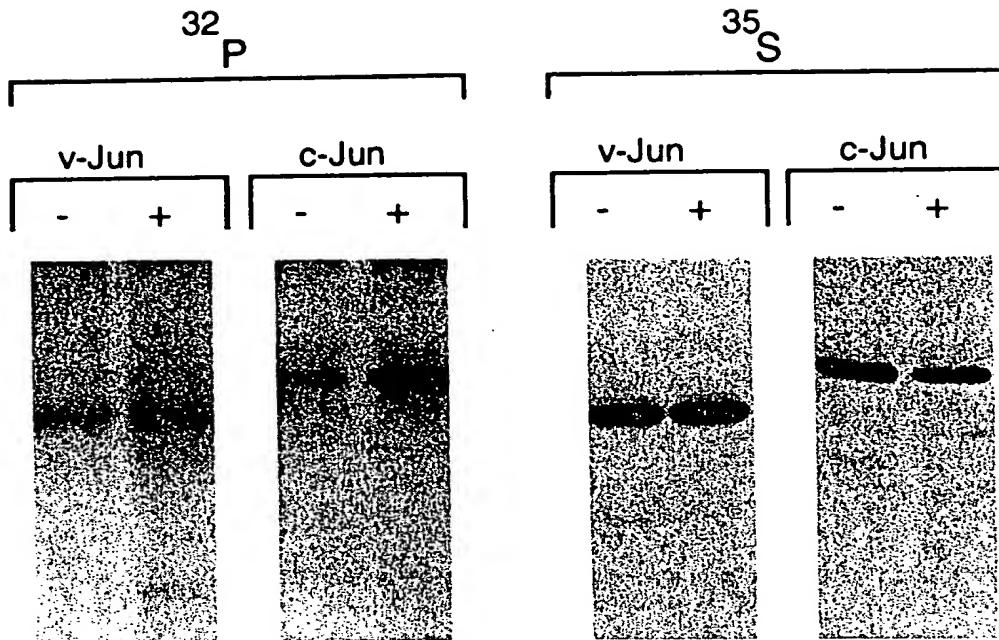


FIG.9A

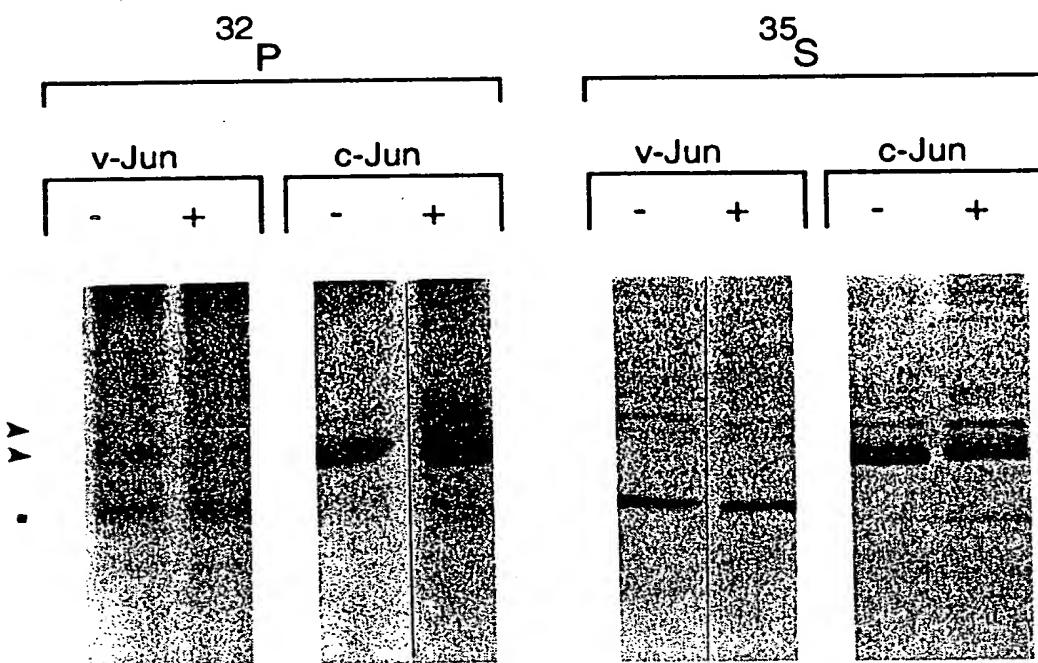


FIG.9B

GAATTCCGGG	GCGGCCAAGA	CCC	GGCCCG	GC	CACGGTCCG	CACTGATCCG	60											
CTCCGGCGA	GAGCCGCTGC	TCTGGAACT	CA	GTTCGCCT	GCGGACTCCG	AGGAACCGCT	120											
GGC	CACGAAG	ACCCGTCAGT	GAGT	GACCCGG	GA	CTTCAA	AGCCGGTAG	GGCGGCCAG	180									
TCCACAAGTA	AGAGTGGGG	AGGCATCTTA	ATTAACCCCTG	CGCT	CCCTGG	AGCAGCTGGT	240											
GAGGAGGGCG	CACGGGACG	ACAGCCAGG	GGTGGTGGG	CTCTT	AGAGA	AACTTTCCCT	300											
GTCAAAGGCT	CCCCGGGG	CGGGTGTCCC	CCG	CCTGCCA	CAG	CCCTGTT	GGGGCCCCGA	360										
AACTTGCGG	GGCACGGCAA	ACTAACCTCA	CGTGAAGTGA	CGGACTGTTC	T	ATG	ACT	417										
					1	Met	Thr											
GCA	AAG	ATG	GAA	ACG	ACC	TTC	TAT	GAC	GAT	GCC	CTC	AAC	GCC	TCG	TCG	TTC	465	
Ala	Lys	Met	Glu	Thr	Thr	Phe	Tyr	Asp	Asp	Ala	Leu	Asn	Ala	Ser	Ala	Ser	Phe	
					5													15
CTC	CCC	TCC	GAG	ACG	GGA	CCT	TAT	GGC	TAC	AGT	AAC	CCC	AAG	ATC	CTG	CTG	513	
Leu	Pro	Ser	Glu	Arg	Gly	Pro	Tyr	Gly	Tyr	Ser	Asn	Pro	Lys	Ile	Ile	Leu		20
						25												30
AAA	CAG	AGC	ATG	ACC	CTG	AAC	CTG	GGC	GAC	CCA	GTG	GGG	AGC	CTG	AAG	561		
Lys	Gln	Ser	Met	Thr	Leu	Asn	Leu	Ala	Asp	Pro	Val	Gly	Ser	Leu	Lys		35	
					40												45	

FIG. IOA

CGG CAC CTC CGC GCC AAG AAC TCG GAC CTC CTC ACC TCG CCC GAC GTG	609		
Pro His Leu Arg Ala Lys Asn Ser Asp Leu Thr Ser Pro Leu Asp Val			
55	65		
GGG CTG CTC AAG CTC GCG TCG CCC GAG CTG GAG CGC CTG ATA ATC CAG	657		
Gly Leu Leu Lys Leu Ala Ser Pro Glu Leu Glu Arg Leu Ile Ile Gln			
70	80		
TCC AGC AAC GGG CAC ATC ACC ACC ACG CCG ACC CCC ACC CAG TTC CTG	705		
Ser Ser Asn Gly His Ile Thr Thr Pro Thr Pro Thr Gln Phe Leu			
85	90	95	
TGC CCC AAG AAC GTG ACA GAT GAG CAG GAG GGG RTC GCC GAG GGC RTC	753		
Cys Pro Lys Asn Val Thr Asp Glu Gln Glu Gly Phe Ala Glu Gly Phe			
100	105	110	
GTC CGC GCC CTG GCA CTG CAC AGC CAG AAC ACC CTG CCC ACC GTC	801		
Val Arg Ala Leu Ala Glu Leu His Ser Gln Asn Thr Leu Pro Ser Val			
115	120	125	130
ACG TCG GCG CAG CCC GTC AAC GGG GCA GGC ATG GTG GCT CCC GCC	849		
Thr Ser Ala Ala Gln Pro Val Asn Gly Ala Gly Met Val Ala Pro Ala			
135	140	145	155
GTA GCC TCG GTG GCA GGG AGC GGC AGC GGC GGC TTC AGC GCC AGC	897		
Val Ala Ser Val Ala Gly Gly Ser Gly Ser Gly Phe Ser Ala Ser			
150	160		

FIG. IOB

CTG	CAC	AGC	GAG	CCC	CCC	GTC	TAC	GCA	AAC	CTC	AGC	AAC	TTC	AAC	CCA		945
Leu	His	Ser	Glu	Pro	Pro	Val	Tyr	Ala	Asn	Leu	Ser	Asn	Phe	Asn	Pro		
165							170						175				
GCC	GCG	CTG	AGC	GGC	GGC	GGC	GGC	CCC	TCC	TAC	GGC	GGC	GGC	GGC	GGC		993
Gly	Ala	Leu	Ser	Ser	Gly	Gly	Gly	Ala	Pro	Ser	Tyr	Gly	Ala	Ala	Gly		
180							185						190				
CTG	GCC	TTT	CCC	GGC	CAA	CCC	CAG	CAG	CAG	CAG	CCC	CCC	CAC	CAC	CAC		1041
Leu	Ala	Phe	Pro	Ala	Gln	Pro	Gln	Gln	Gln	Gln	Pro	Pro	His	His	His		
195							200						205				
CTG	CCC	CAG	CAG	ATG	CCC	GTC	CAG	CAC	CCG	CCG	CTG	CAG	CCC	CTG	AAG		1089
Leu	Pro	Gln	Gln	Met	Pro	Val	Gln	His	Pro	Arg	Leu	Gln	Ala	Leu	Lys		
							215						220				
GAG	GAC	CCT	CAG	ATA	GTC	CCC	GAG	ATG	CCC	GAG	ACA	CCC	CCC	CTG		1137	
Glu	Glu	Pro	Gln	Ile	Val	Pro	Glu	Met	Pro	Gly	Glu	Thr	Pro	Pro	Leu		
							230						235				
TCC	CCC	ATC	GAC	ATG	GAG	TCC	CAG	GAG	CGC	ATC	AAG	GGG	GAG	AGG	AAG		1185
Ser	Pro	Ile	Asp	Met	Glu	Ser	Gln	Glu	Arg	Ile	Lys	Ala	Glu	Arg	Lys		
							245						250				
CCC	ATG	AGG	AAC	CCG	ATC	GCT	GCC	TCG	AAG	TGC	CGA	AAA	AGG	AAG	CTG		1233
Arg	Met	Arg	Asn	Arg	Ile	Ala	Ala	Ser	Lys	Cys	Arg	Lys	Arg	Lys	Leu		
							260						265				
																270	

FIG. IOC

GAG AGA ATC CCC CCG CTG GAG GAA AAA	GTG AAA ACC TTG AAA GCT CAG	1281
Glu Arg Ile Ala Arg Leu Glu Glu Lys Val Lys	Thr Lys Ala Gln	
275	285	290
AAC TCG GAG CTG GCG TCG ACG GCC AAC ATG CTC AGG GAA CAG GTC GCA	1329	
Astn Ser Glu Leu Ala Ser Thr Ala Asn Met Leu Arg Glu Gln Val Ala		
295	300	305
CAG CTT AAA CAC AAA GTC ATG AAC CAC GTT AAC ACT GGG TGC CAA CTC	1377	
Gln Leu Lys His Lys Val Met Asn His Val Asn Ser Gly Cys Gln Leu		
310	315	320
ATC CTA ACG CAG CAG TTG CAA ACA TTT TGAAGAGAGA CCGTCGGGG	1424	
Ile Leu Thr Gln Gln Leu Gln Thr Phe		
325	330	
CTGAGGGCA AGGAAGAAAA AAAATAACAC AGAGAGACAG ACTTGAGAAC TTGACAAGTT	1484	
GCCACGGAGA GAAAAAAGAA GTGTCGGAGA ACTAAAGCCA AGGGTATCCA AGTTGGACTG	1544	
GGTTCGGTCT GACGGCCCC CCAGTGTGCA CGAGTGGAA CCACCTGGTC GCGCCCTCCC	1604	
TTCGGCTCGA GCCAGGGAGC GGGCGCCTGG GGGCTGCCC GCTTTCGGGA CGGGCTGTCC	1664	
CCGGCCGAAC GAAACGTTGG ACTTTCCGTTA ACATTGACCA AGAAACTGCAT GGACCTAACAA	1724	

FIG. 1OD

TTCGATCTCA TTCAGTATTAAAGGGGGCAG GGGGAGGGG TTACAAACTG CAATAGAGAC 1784
TGTAGATTGC TTCTGTAAGT CTCCTTAAGA ACACAAAGCC GGGGGAGGGT TGGGGAGGGG 1844
CGGCAGGAGG GAGGTTTGAG AGAGCCGGCC TGAGCCCTACA GATGAAACTCT TTCTGGCCTG 1904
CTTTCGTTAA CTGTGTATGT ACATATATA ATTTTTTAAT TTGATTAAAG CTGATTACTG 1964
TCAATAAACAGCTTCATGCC TTTGTAAGTT ATTTCCTGTT TGTGTTGTTG GGATCCTGCC 2024
CAGTGTTGTT TGTAAATAAG AGATTTGGAG CACTCTGAGT TTACCATTTG TAATAAAGTA 2084
TATAATTTT TT 2096

FIG. IOE

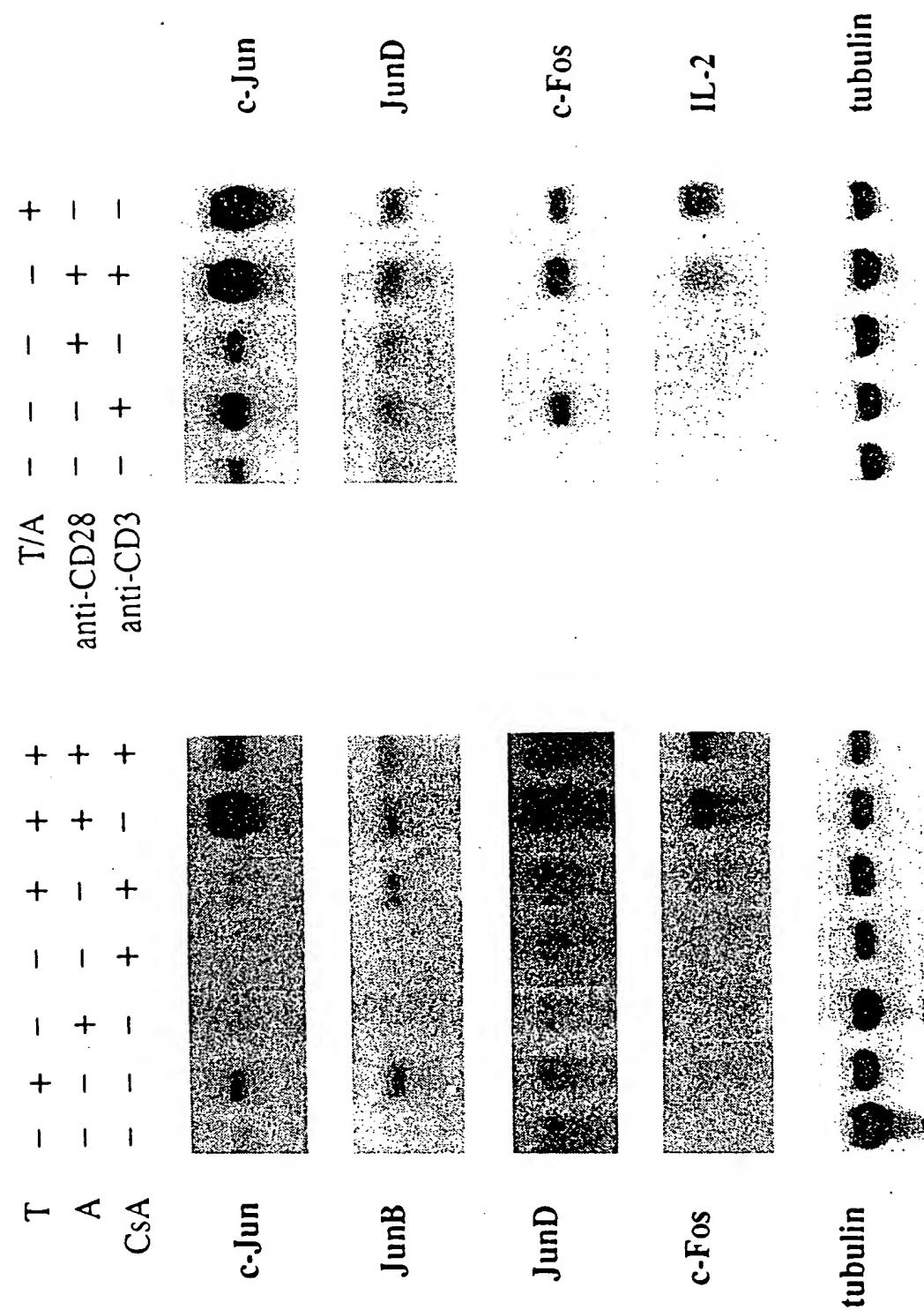


FIG.—B

FIG. IIA

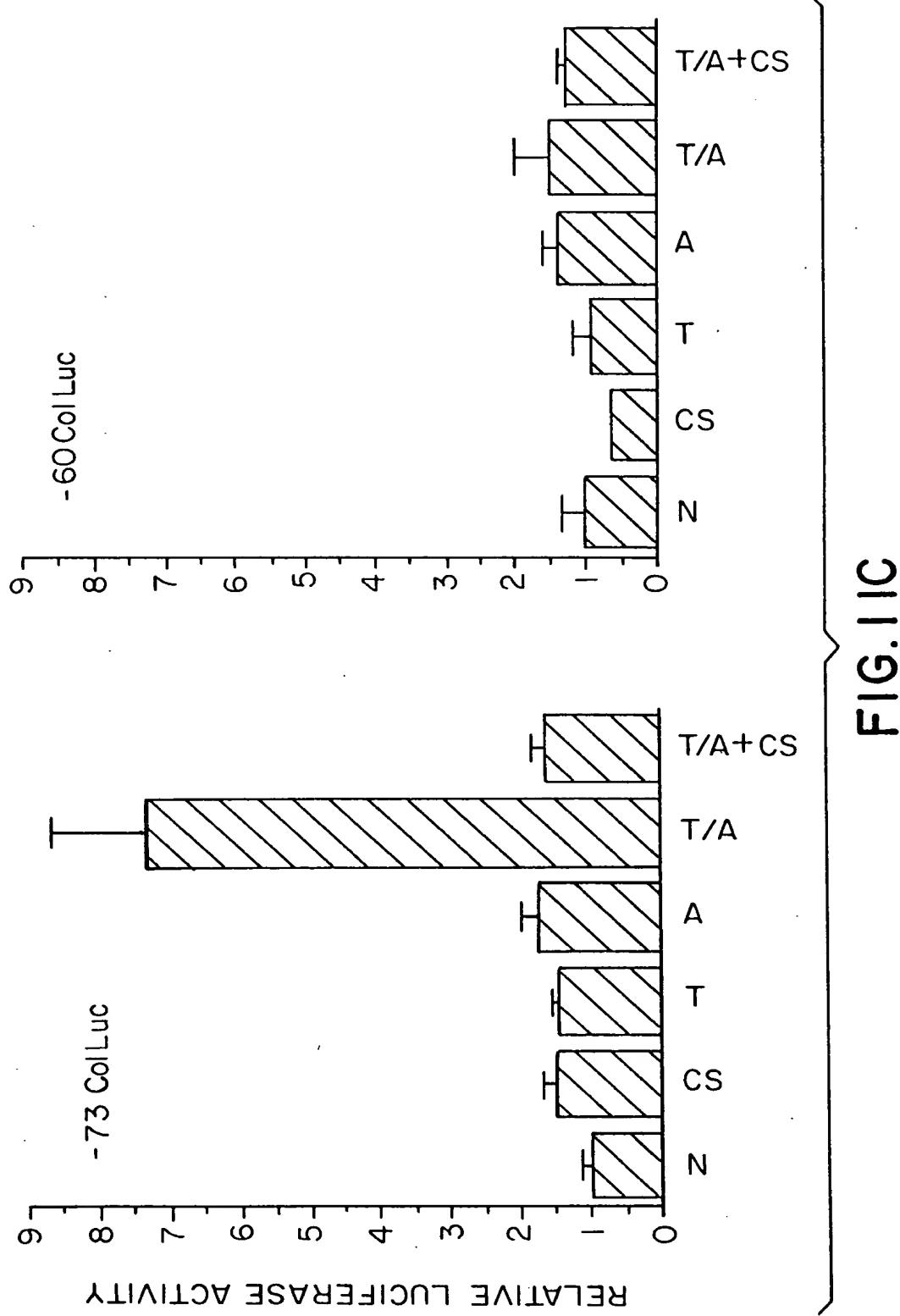


FIG. 12A

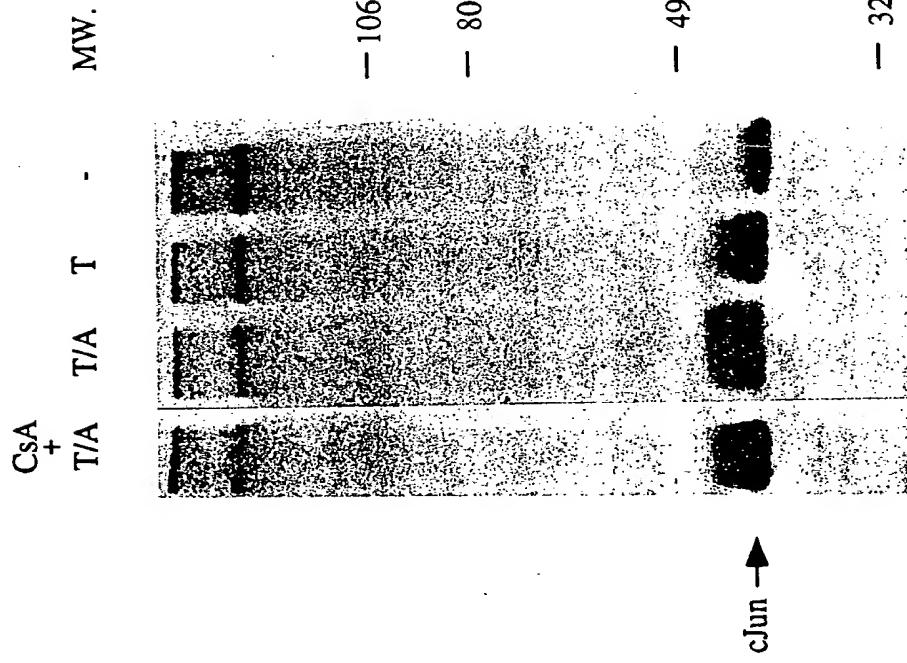
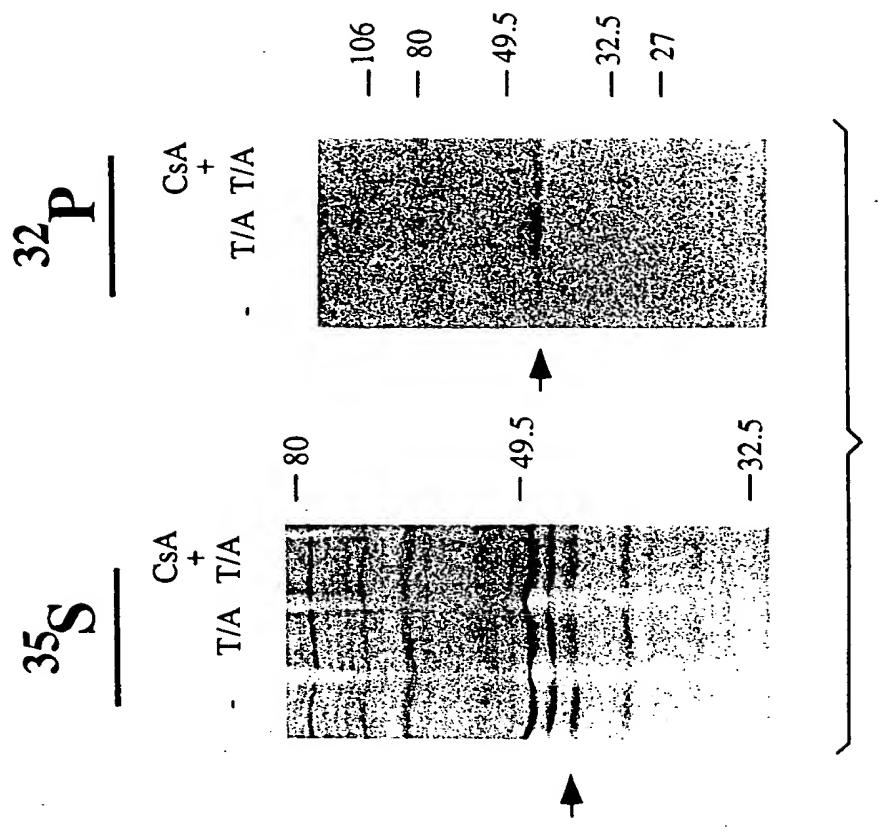


FIG. 12B



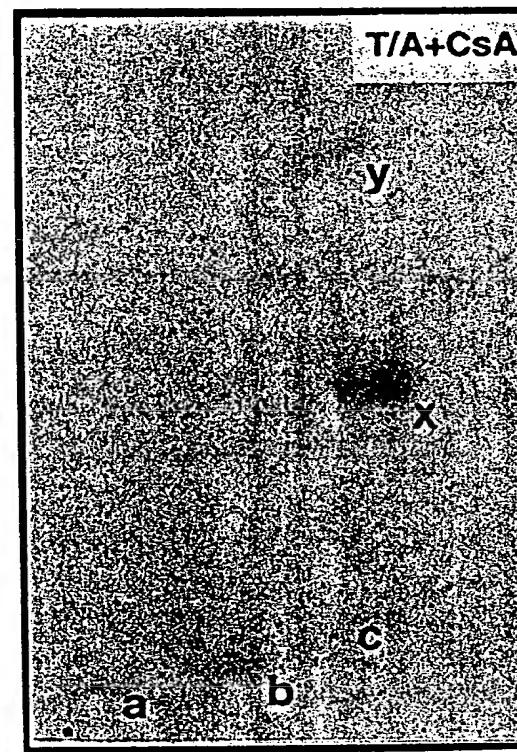
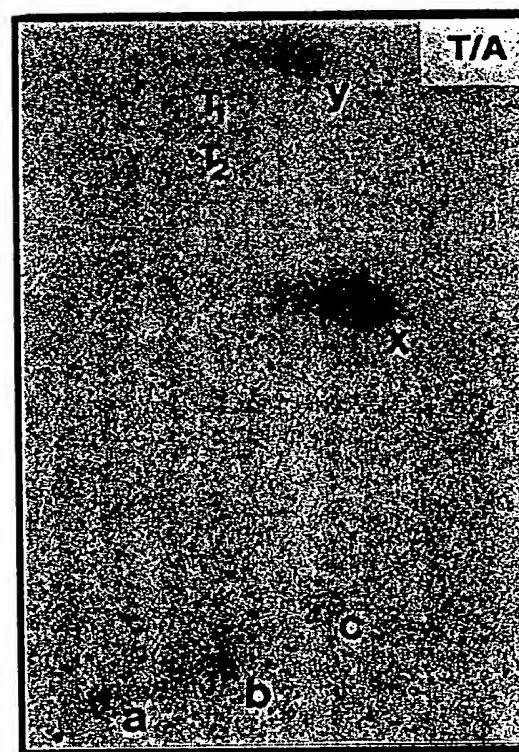
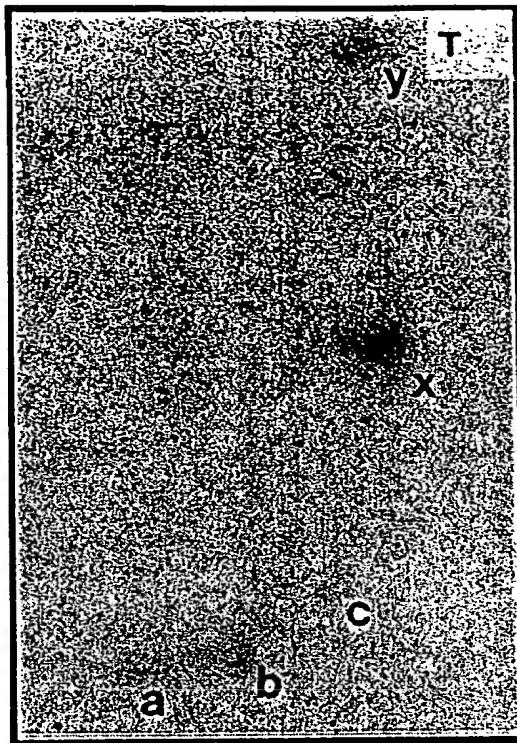
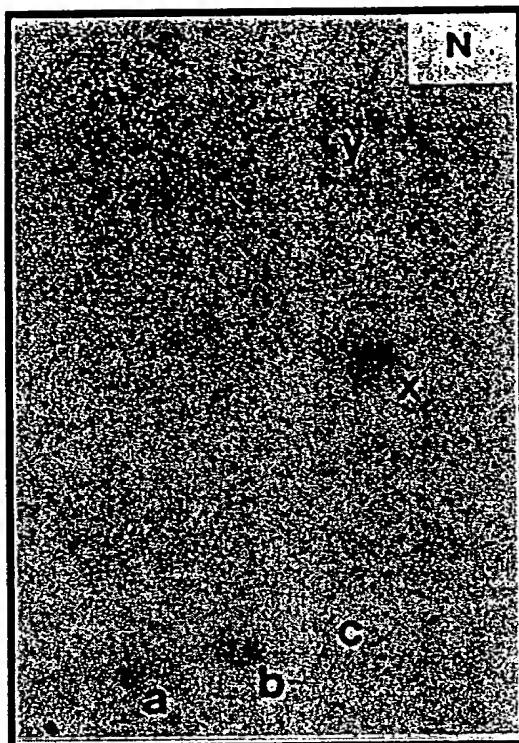


FIG.12C

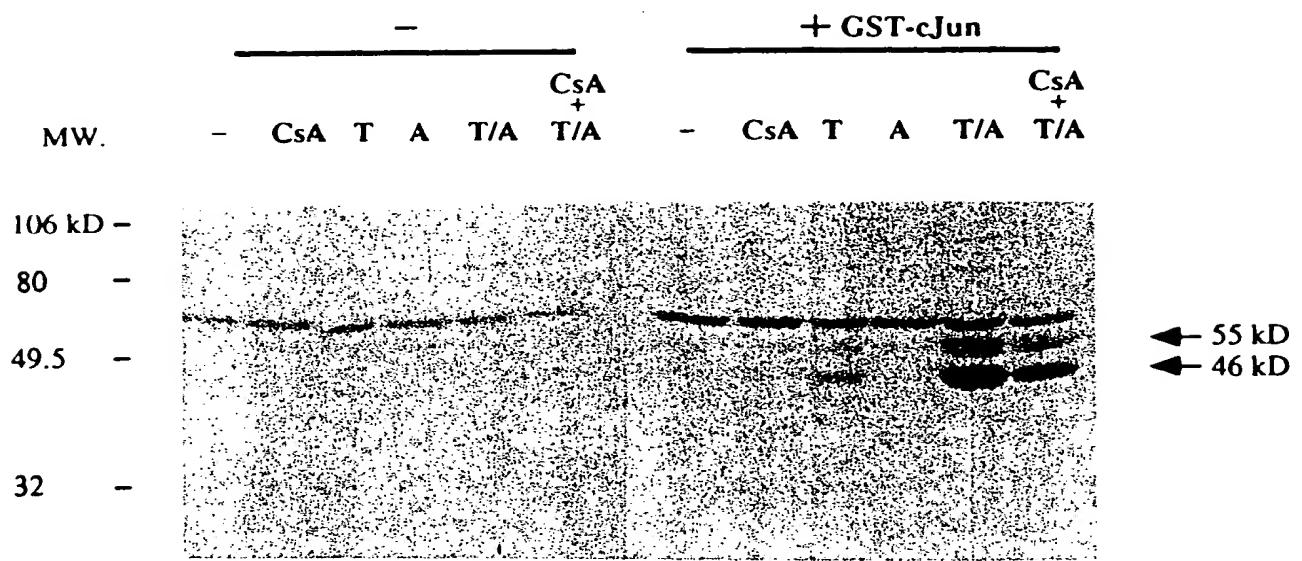


FIG.13A

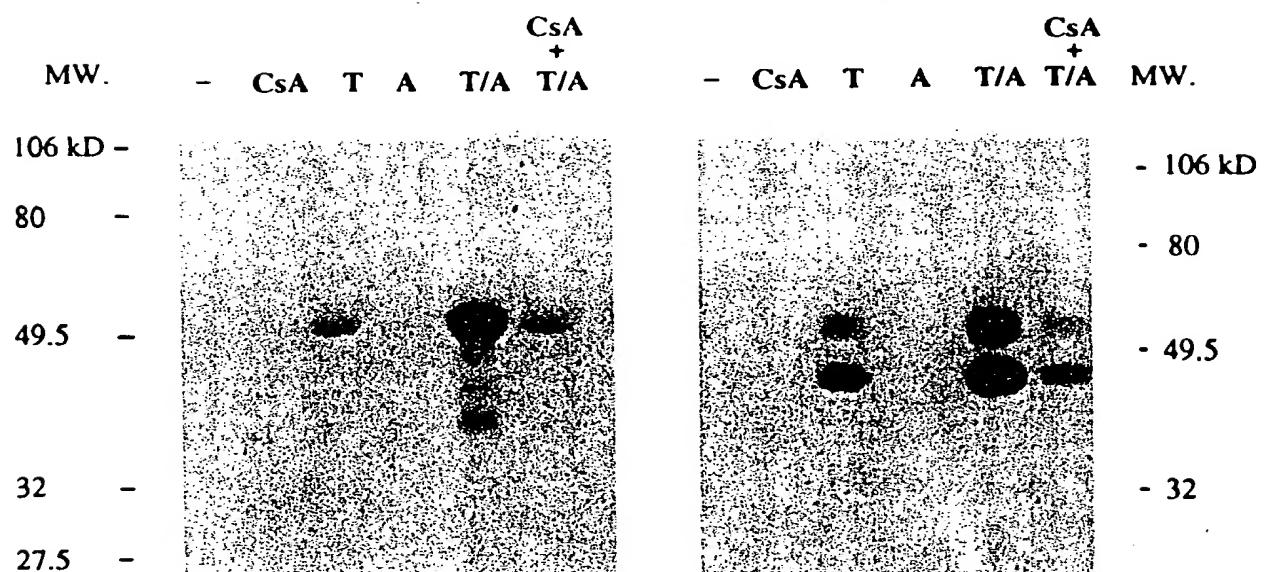


FIG.13B

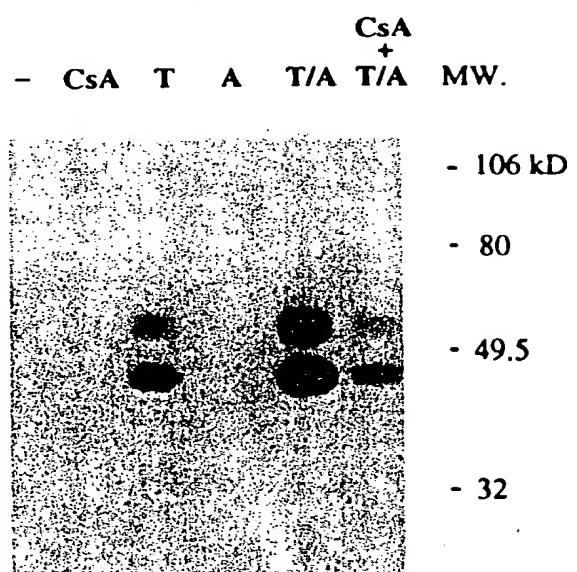
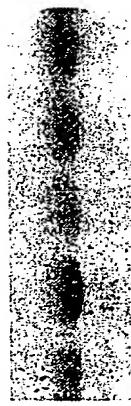


FIG.13C

FR3T3

PC12

CsA₊
- T A T/A T/A



CV.1

CsA₊
- T T T/A T/A



Thymus

CsA₊
- T A T/A T/A



FIG.14

CsA₊
- CsA T A T/A T/A MW.

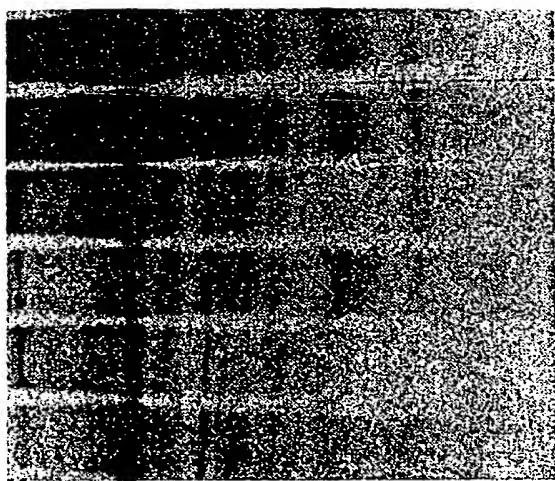


FIG. 15A

Erk-1 Mut →

CsA₊
- T A T/A T/A MW.

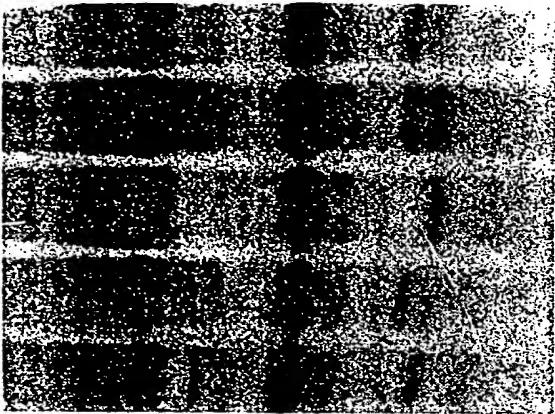


FIG. 15C

Erk-1 Mut →

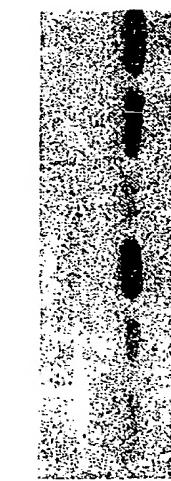


FIG. 15B

MBP →



FIG. 15D

MBP →

FIG.16A

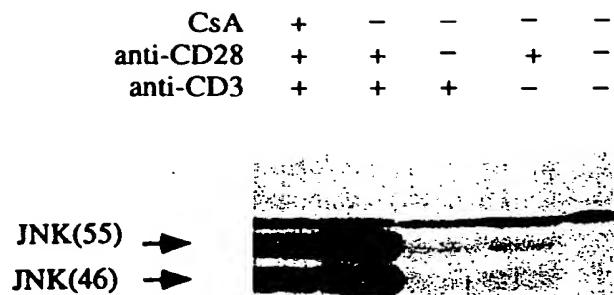


FIG.16B

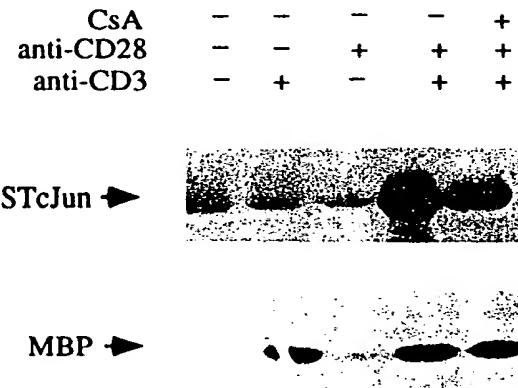
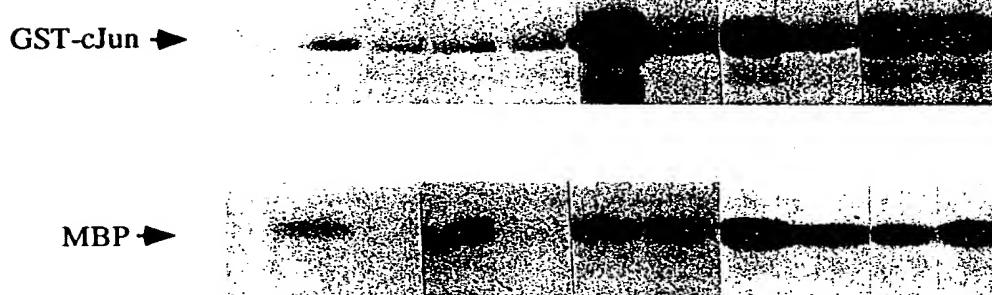


FIG.16C

	1	2	3	4	5	6	7	8	9	10	11
CsA	-	-	-	-	-	-	+	-	+	-	+
anti-CD28	-	-	-	-	+	-	-	-	-	+	+
anti-CD3	-	-	-	+	-	-	-	+	+	-	-
A	-	-	+	-	-	+	+	-	-	-	-
T	-	+	-	-	-	+	+	+	+	+	+



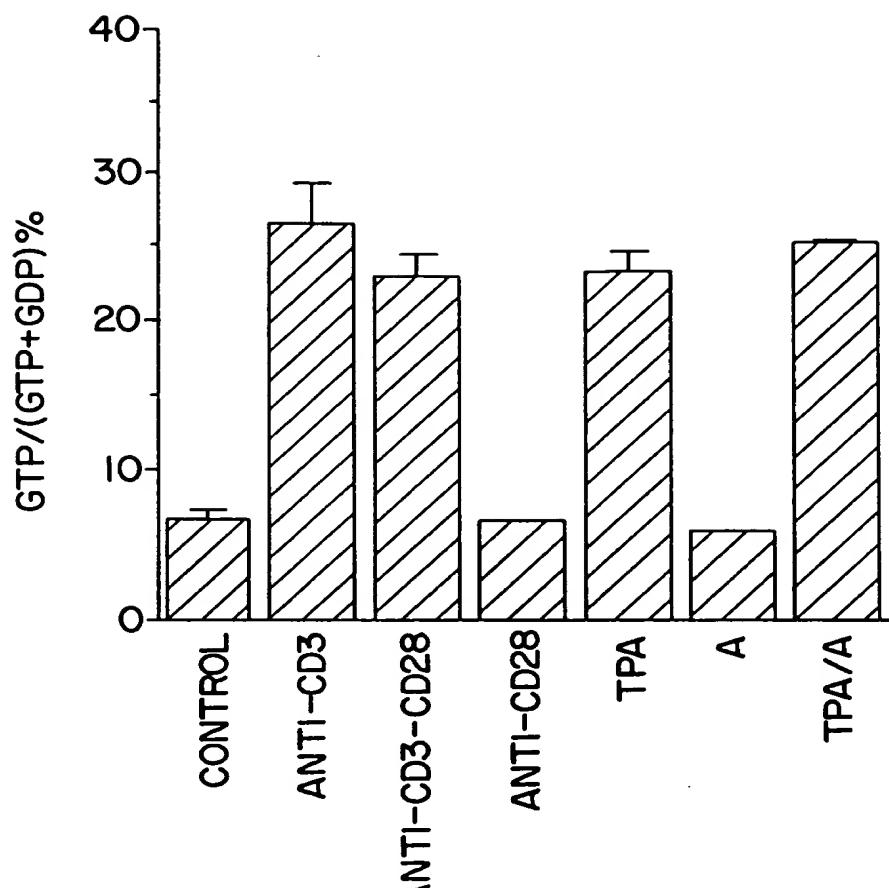


FIG. 17A

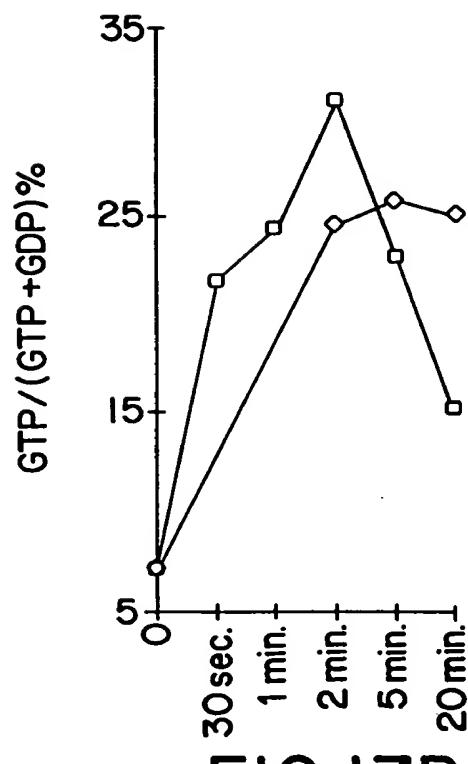


FIG. 17B